

thermally absorbent material). Further, the Examiner asserts that, while the applicant's representative personally believes that lithium is not thermally absorbent, the assertion is merely an attorney's argument without factual support.

As an initial point of clarification, the applicants respectfully submit that one of ordinary skill in the art would not understand, in the context of a positive active material including a lithiated compound as recited in claim 1, that lithium is thermally absorbent in even a poor degree), and that evidence of this understanding in the art was provided. Specifically, the applicants respectfully point to the definition of lithium included in the Response in which applicants noted that at least HAWLEY'S CONDENSED CHEMICAL DICTIONARY, p. 705 (12<sup>th</sup> Ed. 1993) supports the applicants' position. Therefore, it is respectfully submitted that there is evidence of record which supports the applicants' position.

In contrast, the Examiner has not provided evidence that lithium would be understood by one of ordinary skill in the art as being thermally absorbent instead of thermally emissive in the recited context, and has not explained this contrary evidence of the understanding in the art in maintaining the rejection.

Since the Examiner's position is not supported by evidence of record, it appears that the Examiner is relying on personal knowledge in defining lithium hydroxide as being thermally absorbent in the context of active materials having lithiated compounds. As such, the rejection is being based, in part, on the personal knowledge of the Examiner. The personal knowledge of the Examiner, when used as a basis for a rejection, must be supported by an affidavit as to the specifics of the facts of that knowledge when called for by the applicant. See, MPEP 2144.03, 37 C.F.R. § 1.104(d)(2). In short, the rules of the U.S. Patent and Trademark Office require that the Examiner must either support this assertion with evidence or an Affidavit, or withdraw the rejection. Therefore, it is further respectfully requested that the Examiner support the rejection with either an affidavit or a reference, or withdraw the rejection.

Additionally, in order to find that a reference anticipates a claim, the reference must

disclose each element of the claim. In interpreting the reference, the Examiner is to broadly interpret the claim, but must do so within the bounds of reason. In re Morris, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997), MPEP 2111. Thus, while the Examiner is to avoid reading limitations from the specification into the claims, the Examiner should not interpret claim limitations so broadly as to contradict or otherwise render a limitation meaningless as would be understood by those of ordinary skill in the art. See, In re Cortright, 49 USPQ2d 1464, 1467 (Fed. Cir. 1999), In re Zletz, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), MPEP 2111.01. It is respectfully submitted that there is insufficient evidence of record that one of ordinary skill in the art would understand lithium to be a thermally absorbent material in the context of an active material including a lithiated compound. Therefore, it is respectfully submitted that there remains insufficient evidence of record that the lithium hydroxide of Amatucci et al. would be understood to disclose "a thermal-absorbent element-included hydroxide" as recited in claim 1.

Additionally, on pages 3-4, the Examiner asserts that Example 3 of Amatucci et al. discloses the creation of a lithiated powder from a combination of  $B_2H_3$  and  $LiOH \cdot H_2O$ , and that a secondary product "might be a hydroxide of boron." However, it is respectfully submitted that where a reference does not explicitly disclose a feature, the Examiner needs to provide evidence that the feature is inherently present and is not a mere possibility. Mere conjecture as to what may result does not take the place of disclosure. MPEP 2112 ("[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." (emphasis in original)). Thus, in order for the burden to shift to the applicants, the Examiner needs to provide sufficient evidence of record as to the necessary result of Example 3 so as to afford the applicants an opportunity to examine and rebut any such evidence. Without such evidence, the Examiner is relying on conjecture and has not established a prima facie case for anticipation based upon a theory of inherency.

Since the Examiner has not provided evidence that a secondary product resulting from Example 3 *necessarily* results in the a hydroxide of borate, and since the Examiner's assertion is

only that such a result "may" occur if a proper set of reactions is set forth, it is respectfully submitted that the Examiner has not provided sufficient evidence of record to show that the lithiated powder of Example 3 necessarily results in a hydroxide of borate as is required to rely on Amatucci et al. inherently disclosing such features as set forth in the Office Action.

Further, to the extent the Examiner is relying on personal knowledge in maintaining the rejection, it is further respectfully requested that the Examiner support the rejection with either an affidavit or a reference, or withdraw the rejection.

As such, it is respectfully submitted that Amatucci et al. does not disclose a hydroxide of boron as recited in claims 3 and 10.

On pages 4-5 of the Advisory Action, the Examiner again asserts that claims 5 and 13 recite merely method limitations that do not patentably distinguish over Amatucci et al. since the claims are to the product itself and not to the manner in which the product is made. However, it is respectfully submitted that the Examiner has not addressed the structural differences resulting from the recited annealing process as pointed out in the Response, or the evidence of the structural differences contained in the specification. Specifically, as noted in at least paragraph 0022 of the instant application, using temperatures in excess of 200°C makes it impossible to convert to the desired "thermal-absorbent element-included hydroxide, the thermal-absorbent element-included oxyhydroxide, the thermal-absorbent element-included oxycarbonate, or the thermal-absorbent element-included hydroxycarbonate."

In evaluating whether claim structure recited in terms of the process defines over the prior art, the Examiner needs to account for evidence in embodiments and experiments set forth in the specification that show the non-obvious nature of the feature in order to make out a prima facie case for obviousness. In Re Glaug, 62 USPQ2d 1151 (Fed. Cir. 2002).

As such, it is respectfully submitted that there is evidence of record that the result of the drying as recited in claims 5 and 10 results in a different structure such that the annealing process of Amatucci et al. does not disclose or suggest the composition as recited in claims 5

and 10.

Similarly, it is respectfully requested that the Examiner reconsider that Examiner's position on pages 5-6 of the Advisory Action. Specifically, the process of the hydroxide would be coated on the  $\text{LiMn}_2\text{O}_4$  disclosed in Amatucci et al. is such that the hydroxide would only exist on the coating. Specifically, the coated positive active material is included in a binder matrix with carbon black. (Col. 3, lines 1-13). In contrast, the recited process in claim 38 has the formed positive active material and the formed additive being combined prior to annealing such that the resulting structure would include the additive within the coating as opposed to a surface layer. Therefore, it is respectfully submitted that the structure as recited in claim 38 is not the structure which is disclosed in Amatucci et al.

**REJECTION UNDER 35 U.S.C. §§112 and 132:**

In the Advisory Action at pages 6-8, the Examiner rejects claims 36 and 37 under 35 U.S.C. §§112, first paragraph, and 132, as not being supported by the specification as filed and therefore representing new matter. This rejection is respectfully traversed and reconsideration is requested.

Specifically, the Examiner asserts that, while certain examples are shown with additives not including lithium, there are a cosmically infinite number of additives which are encompassed by hydroxides, oxyhydroxides, and hydrocarbonates and that purposes of legal estoppel, the claim language must exclude all elements of the Periodic Table but Al, H, and B. However, it is noted that the Examiner's analysis does not construe the claims as recited, or the various factors required in order to establish a prima facie rejection under 35 U.S.C. §112, first paragraph. Specifically, the requirements of 35 U.S.C. §112, first paragraph, are not that all details of an invention as claimed must be put forth in the written description using the same descriptive terminology, but instead whether the written description, including the claims as originally presented, provides sufficient details of the invention such that the disclosure reasonably conveys to one of ordinary skill in the art that the inventor had possession at the time of the more

broadly claimed subject matter in light of the specific examples set forth in the specification. As such, the requirements of 35 U.S.C. §112, first paragraph, are whether the written description provides sufficient details of the invention such that the disclosure "reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter." In re Hayes Microcomputer Products, Inc. Patent Litigation, 25 USPQ2d at 1245 quoting Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, 1116 (Fed. Cir. 1991); see, Union Oil Co. v. Atlantic Richfield Co., 54 USPQ2d at 1233.

In regards to whether a claim term is supported by specific examples, as noted by the Federal Circuit in Bilstad v. Wakalopoulos, Civ. Case. No. 03-1528 (Fed. Cir. October 7, 2004), the mere fact that the specification discloses only specific examples does not mean that the specification does not support an added genus claim. Specifically, the Federal Circuit noted that "this court has continued to apply the rule that disclosure of a species may be sufficient written description support for a later claimed genus including that species." As such, absent evidence of unpredictability in the art, applicants are entitled to claim a genus based on the disclosure of specific examples within that genus.

Since there is no evidence of record that one of ordinary skill in the art would not comprehend and discern the claimed features based on the disclosure in the specific examples, or that one of ordinary skill in the art would necessarily not comprehend that other elements of the periodic chart would meet the recited features and what those elements would be, it is respectfully submitted that there is insufficient evidence of record to maintain the rejections under 35 U.S.C. §§112, first paragraph, and 132.

**CONCLUSION:**

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. Thus, there being no further

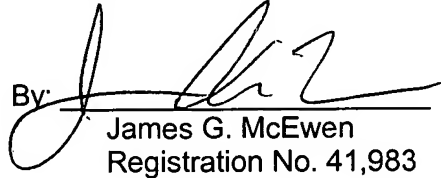
outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any additional fees associated with the filing of this Response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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